

Evidence and Experience with the Basic Preventive Care Package in Uganda



Florence Naluyinda Kitabire MD,MPH
PEPFAR-Uganda (HHS/CDC)
February 16, 2006

Outline

- Background
- What is the BCP and its benefits
- Evidence of the components
- Implementation of the Package
- Conclusion

HIV and Africa

- **In sub-Saharan Africa:**
 - Despite having the heaviest burden of the HIV/AIDS pandemic,
 - Majority of persons with HIV have limited access to good care and treatment
 - Current care focuses on access to ARVs and less on prevention interventions
- **Need standardized preventive measures:**
 - Developed the “basic preventive care package” (BCP)
 - For HIV Infected persons with limited access to HIV-related services

Basic Preventive Care Package

The overall goal is to have all persons with HIV access preventive care through the following strategies:

- Identification of persons with HIV
 - HCT
- Prevention of HIV transmission
 - Sexual partners and unborn children
- Prolonging life and improving quality of persons with HIV
 - Prevention of OIs

What is the Basic Preventive Care Package & its benefits

- Components are simple, standardized, evidence-based prevention & care interventions
- Benefit persons with HIV and their families
- Prevents mortality and Delays disease progression and need for ARVs
- Lays ground work for ARV therapy
- Complements ARV therapy and palliative care

Components of the Preventive Care Package

Family-based HCT
PWP

Interventions for Prevention of OI
Cotrimoxazole prophylaxis

Safe water vessel

Insecticide treated mosquito
nets

INH prophylaxis

Multivitamins

ARV and TB care

Family Based VCT

- **Identifies beneficiaries for prevention and care interventions**
 - **Discordant couples and children with HIV**
- **Allows for open household support for**
 - **challenges of disclosure and behavior change**
 - **Medication adherence and support**

Prevention with Positives Interventions (PWP)



Prevention with positives (PWP): Rationale

- **PWP focuses on persons with HIV and families**
 - **Motivates them to prevent HIV transmission to:**
 - **Sexual partners and**
 - **Unborn and breastfeeding children**
 - **Special counseling needs**

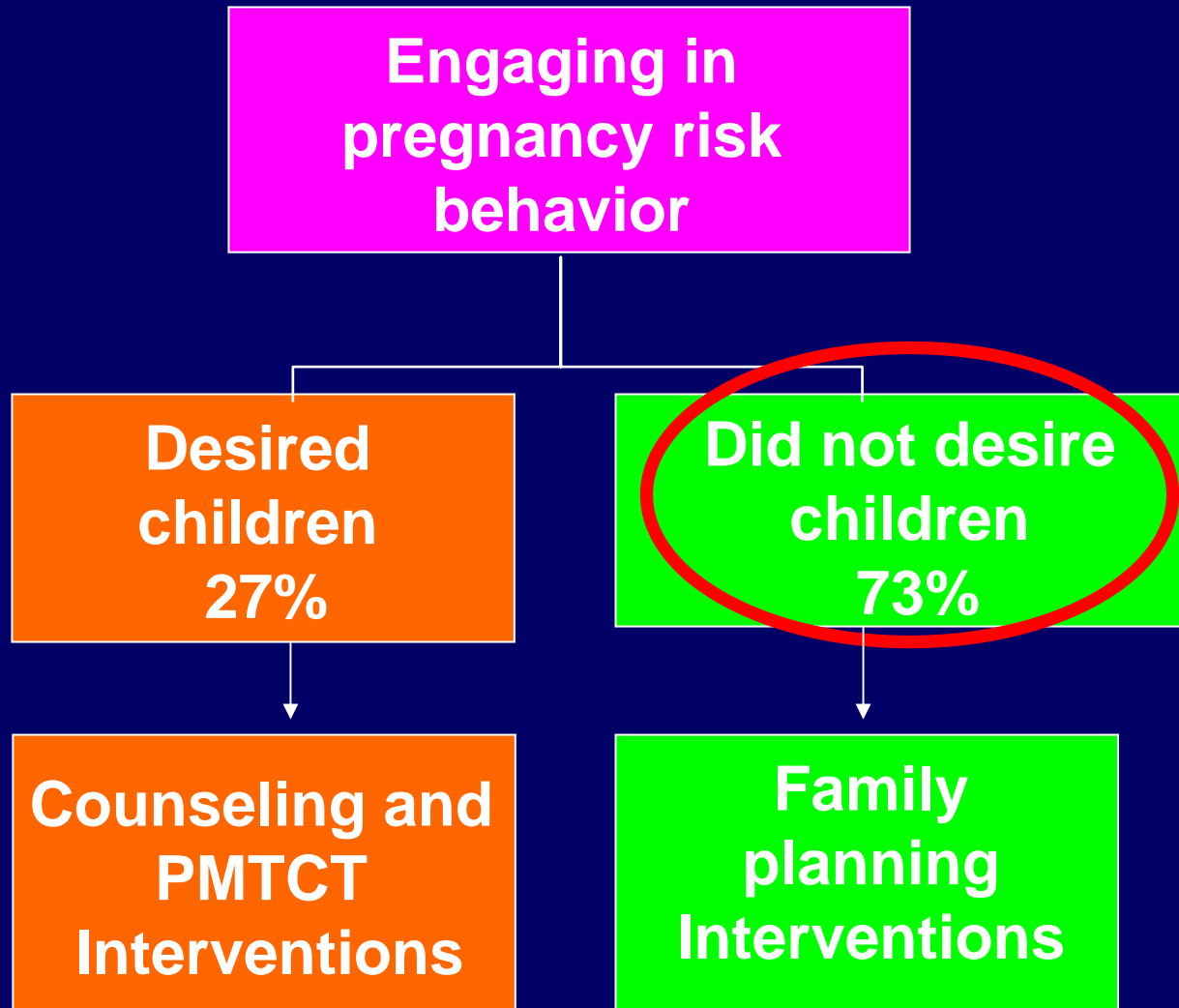
PWP Interventions

- **Partners or couples HIV counseling and testing**
- **Supported disclosure**
- **Risk reduction measures:**
 - **Abstinence and safe sex practices (condom use)**
 - **STI screening and management**
 - **Family planning**
 - **PMTCT services**

Prevention with Positives (PWP) Formative Evaluation

- **Cross-sectional study among 1092 HIV-positive members of AIDS support organization in Jinja**
- **64% experienced death of ≥ 1 biological child**
 - **Only 7% of women and 27% men desired more children**

Pregnancy Risk Behavior in HIV-positive clients



Prevention of Vertical Transmission

- **Provision of family planning to people living with HIV is primary prevention for PMTCT**
- **Integration of family planning in AIDS service organizations not universal**
- **Desire for children increases for those on ART, but unwanted pregnancies still common**

Prevention of Opportunistic infections: Cotrimoxazole Prophylaxis



Efficacy studies of cotrimoxazole prophylaxis

<u>Country</u>	<u>Morbidity</u> ↓	<u>Hosp.</u> ↓	<u>Mortality</u> ↓
C d'Ivoire (1999)	-----	43%	46%
S. Africa (2001)	48%	-----	44%
Senegal (2001)	-----	-----	16% (NS)
Zambia (2004)	-----	23%	43%
Malawi (2004)	-----	-----	28%
Uganda (2002)	69%	-----	33%
Uganda (2004)	25-72%	31%	46%

Results for Cotrimoxazole prophylaxis evaluation in Uganda

Efficacy

Mortality	46%
Malaria	72%
Diarrhea	35%
Hospitalization	31%
Adverse reactions	2%

Results for Cotrimoxazole prophylaxis evaluation in Uganda

- Reduced rate of decline in CD4 count (90 cells less decline per year) and benefited viral load (0.55 log less increase per year)
- Saved health system \$2.50 per person treated and a gain of 6.57 Disability-Adjusted Life Years (DALYS) per 100 person-years.
- Effective for both children and adults

Benefit of parent taking cotrimoxazole for children

- Having adult with HIV take cotrimoxazole was associated with 63% reduction in death among HIV-negative children <10 years old
- Having a parent die tripled the risk HIV-negative child would die
- Prophylaxis not associated with increased antimicrobial resistance among diarrhea pathogens infecting family members



Prevention of Opportunistic infections: Provision of safe water



Diarrhea and safe water system

- People with HIV in Africa have 6 times rate of diarrhea than HIV-negatives
- Safe Water system involves chlorination and storage of water in home
- RCT among 509 persons with HIV
 - 25% fewer diarrhea episodes and less dysentery
 - Benefits HIV-negative family members
- Cost \$4 per year per family

Safe Water System (SWS)

- Water Treatment
 - Filtration with cloth
 - Disinfection with chlorine
- Safe storage of water
 - 20-liter water vessel
 - Maintains disinfection
 - Prevents recontamination



- Behavior change
 - Hand washing
 - Improved sanitation

Prevention of Malaria in PLWHAs and their families



HIV and Malaria

- **High burden of disease:**
 - **HIV/AIDS: Globally 40M people infected (UNAIDS)**
 - **Malaria: 300-500 million clinical episodes annually (WHO)**
- **Majority of HIV and malaria cases occur in sub-Saharan Africa**
- **HIV increases incidence and severity of malaria**
- **Malaria increases viral load by 0.25 log and this increases risk of MTCT in pregnant women**
- **Causes a CD4 cell decline 40 cells/year**

Behavior Change communication for the BCP

- Behavior change communication messages about the BCP through:
 - Client education materials
 - Radio spots and T.V shows
 - Drama skits
 - Training of the health workers, counselors and peer educators on use of the package

Program Scale-up BCP Package

- **>100, 000 people with HIV receiving cotrimoxazole prophylaxis**
- **The Door to door program provides basic care package for >4600 newly diagnosed HIV-infected persons including HIV-discordant couples (ITNs, SWS, PWP/Condoms)**
- **By January 2006, ~30,000 people with HIV have receive basic prevention and care package**

Program Scale-up BCP Package

- **New MOH policies**
 - **Cotrimoxazole prophylaxis**
 - **Counselling and Testing**
- **INH prophylaxis and multi-vitamins**
- **National communication campaign; includes PWP**
- **200,000 people receiving basic care package by 2007**

Conclusion

- **Persons with HIV/AIDS in Africa**
 - should receive effective, evidence-based health care tailored to meet the specific needs of the region including
 - a broad package of care and prevention services
 - ARV medications
- **Provision of BCP is Feasible & an important step towards**
 - reducing health care disparities
 - gaining more control of the global HIV/AIDS epidemic